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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671,656	09/29/2003	Masahiko Murayama	030662-107	9022
21839	7590	02/16/2006		
BUCHANAN INGERSOLL PC (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER CHOWDHURY, TARIFUR RASHID	
			ART UNIT	PAPER NUMBER
			2871	

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/671,656	MURAYAMA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tarifur R. Chowdhury	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 21-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 21,22,25-31,34-46 is/are rejected.
- 7) ☒ Claim(s) 23,24,32,33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. **Claims 21, 22, 25-29, 31, 34-38, 41-44 and 46 are rejected under 35 U.S.C 103 (a) as being unpatentable over Shimoda et al., (Shimoda), USPAT 5,663,310**

4. As to claims 21, 31, 41 and 46, Shimoda discloses (col. 2, lines 61-62; col. 3, lines 20-49; col. 4, lines 1-3, 38-41; col. 6, lines 51-58; col. 9, lines 44-45; col. 11, lines 18-19; col. 24, lines 12-13) a process for preparation of a cellulose acetate film comprising cellulose acetate, wherein the cellulose acetate has an acetic acid content of 58.0 or more (overlaps the claimed range; according to *In re Malagari*, 499 F.2D 1297, 182 USPQ 549 (CCPA 1974), overlapping ranges are at least obvious) the process comprising preparing a cellulose

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acetate solution according to a cooling dissolution method and forming the film by a solvent casting method using the cellulose acetate solution. Shimoda also discloses that the process further comprising stretching the film and the cooling dissolution method uses a halogenated hydrocarbon such as methylene chloride as a solvent.

Accordingly, claims 21, 22, 25, 26, 31, 34, 35, 40 and 41 would have been obvious.

As to claims 27, 36 and 42, it is typical for a cellulose acetate film to contain a compound having at least two aromatic rings in an amount of 0.3 to 20 weight parts based on 100 weight parts of the cellulose acetate for several advantages such as to provide better display performance.

As to claims 28, 29, 37, 38, 43 and 44, Shimoda does not explicitly disclose the limitations such as immersing a surface of the film in an alkali solution or spraying the surface with an alkali solution. However, it is common and known in the art that for efficiently saponifying the film it is preferred to apply an alkali solution onto the cellulose acetate film. Further, it is also known that if the saponification is performed by applying the alkali solution preferably has good wettability onto the cellulose acetate film. Further, spraying or immersing the surface of the film is a known way of applying the solution. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to immerse the surface of the film in an alkali solution or spraying the surface of the film with an alkali solution since performing the saponification by applying alkali solution provides good wettability onto the cellulose acetate film.

As to claim 46, according to **MPEP 2144.05**, in the case where the claimed

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ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed.Cir. 1990) (The prior art taught carbon monoxide concentrations of "about 1-5%" while the claim was limited to "more than 5%." The court held that "about 1-5%" allowed for concentrations slightly above 5% thus the ranges overlapped.); In re Geisler, 116 F.3d1465, 1469-71, 43 USPQ2d 1362, 1365-66 (Fed. Cir. 1997) (Claim reciting thickness of a protective layer as falling within a range of "50 to 100 Angstroms" considered prima facie obvious in view of prior art reference teaching that "for suitable protection, the thickness of the protective layer should be not less than about 10 nm [i.e., 100 Angstroms]." The court stated that "by stating that suitable protection' is provided if the protective layer is about' 100 Angstroms thick, [the prior art reference] directly teaches the use of a thickness within [applicant's] claimed range."). Similarly, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985)

**5. Claims 30, 39 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimoda in view of Braudy et al., (Braudy), USPAT 3,978,247.**

6. Shimoda differs from the claimed invention because he does not explicitly disclose that the surface of the cellulose acetate film is subject to corona discharge treatment.

Braudy discloses a film that is made of cellulose acetate (col. 6, lines 18-20).

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Braudy also discloses that when such films go through corona discharge treatment it improves adhesion.

Braudy is evidence that ordinary workers in the art would find a reason, suggestion or motivation to use a cellulose acetate film that go through corona discharge treatment.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to have the cellulose acetate film of Shimoda to go through corona discharge treatment for advantages such as improved adhesion, as per the teachings of Braudy.

Accordingly, claims 30, 39 and 45 would have been obvious.

### ***Response to Arguments***

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

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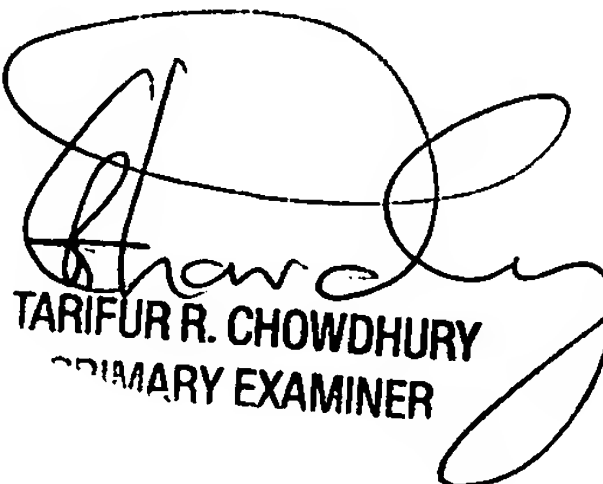
shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tarifur R. Chowdhury whose telephone number is (571) 272-2287. The examiner can normally be reached on M-Th (6:30-5:00) Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (571) 272-2293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TRC  
February 06, 2006



TARIFUR R. CHOWDHURY  
PRIMARY EXAMINER